

CLAIMS

1. A fuel cell comprising at least one single cell having an electrolyte, a fuel electrode, and an air electrode;

wherein the fuel cell is provided with a substrate that supports the single cell;

the electrolyte is disposed on one surface of the substrate, and the fuel electrode and the air electrode are disposed on one surface of the substrate so as to sandwich the electrolyte.

2. A fuel cell according to Claim 1, wherein the heights of both the fuel electrode and the air electrode, as measured from the surface of the substrate, are greater than that of the electrolyte, as measured from the surface of the substrate.

3. A fuel cell according to Claim 2, wherein the fuel electrode and the air electrode are laminated in such a manner that they are separated from each other partially on top of the electrolyte.

4. A fuel cell according to Claim 1, which further comprises at least one single cell disposed on the other side of the substrate and having an electrolyte, a

fuel electrode, and an air electrode;

wherein in the single cell having the electrolyte disposed on the other side of the substrate, the fuel electrode and the air electrode sandwich the electrolyte.

5. A fuel cell according to Claim 1, wherein a plurality of the single cells are disposed on the substrate, and these single cells are connected by an interconnector.

6. A fuel cell according to Claim 1, wherein the width of the electrolyte in the direction sandwiched between the fuel electrode and the air electrode is 10-500 μm .

7. A fuel cell comprising at least one single cell having an electrolyte, a fuel electrode, and an air electrode;

wherein the fuel cell is provided with a substrate that supports the single cell,

the electrolyte is disposed on one surface of the substrate, and one of the fuel and air electrodes is disposed on the electrolyte, and

the other electrode is not in contact with the

electrode disposed on the electrolyte and has at least one portion that is disposed on one surface of the substrate and in contact with the electrolyte.

8. A fuel cell according to Claim 7, wherein the other electrode is disposed on one surface of the substrate adjacent to the electrolyte; and

the thickness of the electrolyte is greater than that of the other electrode.

9. A fuel cell according to Claim 7, wherein a plurality of the single cells are disposed on the substrate, and the plurality of single cells are connected to each other by an interconnector.

10. A fuel cell according to Claim 7, wherein the electrolyte, fuel electrode, and air electrode are formed by a printing method.

11. A fuel cell according to Claim 7, which further comprises at least one single cell having an electrolyte, a fuel electrode, and an air electrode being disposed on the other side of the substrate;

wherein in the single cell having the electrolyte disposed on the other side of the substrate,

-42-

one of the fuel and air electrodes is disposed on the electrolyte, and the other electrode is not in contact with the electrode disposed on the electrolyte and has at least one portion that is disposed on the other side of the substrate and in contact with the electrolyte.